

**AGENDA: MISR Data Users Science Symposium 2013**  
**Beckman Institute Auditorium, California Institute of Technology, Pasadena, CA**

**Monday, December 16**

**Welcome**

8:15 AM	Sign-in	All	30
8:45 AM	Welcome	David Diner	15

**Clouds and Radiation**

**Moderator: Yolanda Roberts (NASA Langley Research Center)**

9:00 AM	MISR cloud and albedo variations over the Arctic Ocean	Dong Wu	20
9:20 AM	Sensitivity of simulated satellite cloud diagnostics to unresolved cloud and precipitation variability in global climate models	Benjamin Hillman	20
9:40 AM	An update on MISR cloud cover products	Larry Di Girolamo	20
10:00 AM	MISR, MODIS and CloudSat-CALIPSO cloud observations in extratropical cyclones: intercomparison and assessment of MERRA and ERA-interim cloud cover in the southern oceans	Catherine Naud	20
10:20 AM	Discussion	All	5
10:25 AM	Break	All	20
10:45 AM	Cloud climatology of Greenland - a comparison of MISR, AATSR and MODIS	Jan-Peter Muller	20
11:05 AM	MISR cloud heights	Roger Davies	20
11:25 AM	Decoding time series of MISR spectral measurements	Guangyu Zhao	20
11:45 AM	High fidelity simulation of MISR cloud scenes using the JPL cloud process model and 3D radiative transfer: An opportunity for algorithm validation?	Zheng Qu	20
12:05 PM	Discussion	All	5
12:10 PM	Lunch	All	90

**Atmospheric Dynamics**

**Moderator: Felix Seidel (JPL)**

1:40 PM	Tropical PBL wind shear with MISR and other satellite data	David Halpern	20
2:00 PM	MISR observations of Kármán vortex streets	Ákos Horváth	20
2:20 PM	Discussion	All	5

**AirMSPI**

2:25 PM	AirMSPI and AirMSPI-2 update	David Diner	20
2:45 PM	AirMSPI polarimetric aerosol characterization: Initial results from recent field experiments	Olga Kalashnikova	20

**Poster session I**

3:05 PM	Poster viewing and break	All	90
---------	--------------------------	-----	----

**AirMSPI (continued)**

4:35 PM	Case study of aerosol and cloud retrieval in an aerosol-above-cloud system using AirMSPI observations	Feng Xu	20
4:55 PM	AirMSPI multiangle polarimetric observations of cirrus clouds: Initial results and future avenues for investigation	Michael Garay	20
5:15 PM	Discussion	All	5
5:20 PM	Adjourn		

**Social event**

6:30 PM	La Cañada Flintridge Country Club
---------	-----------------------------------

**Tuesday, December 17**

## Aerosols

**Moderator: Meredith Franklin (USC)**

9:00 AM	Improving MISR-retrieved aerosol properties over the contiguous United States	Yang Liu	20
9:20 AM	Numerical simulation of sea salt aerosol over the Southern Ocean and validation against surface-based and satellite observations	Marcin Witek	20
9:40 AM	High resolution aerosol retrievals with algorithm MAIAC	Alexei Lyapustin	20
10:00 AM	MISR aerosol contributions to the IPCC process	Ralph Kahn	20
10:20 AM	Discussion	All	5
10:25 AM	Break	All	20
10:45 AM	MISR plume height analyses	David Nelson	20
11:05 AM	Impact of fire aerosols in convective regions on the daily cloud life cycle	Michael Tosca	20
11:25 AM	Analysis of aerosol spatial variability from AERONET-DRAGON and MISR high-resolution data during DISCOVER-AQ	Michael Garay	20
11:45 AM	Massive data set analysis for MISR's Aerosol Product	Amy Braverman	20
12:05 PM	Discussion	All	5
12:10 PM	Lunch	All	90

## Vegetated Surfaces

**Moderator: Lesley-Ann Dupigny-Giroux (University of VT)**

1:40 PM	Regional forest and shrub mapping with MISR: Achievements and challenges	Mark Chopping	20
2:00 PM	Mapping changes in shrub abundance in the North Slope of Alaska using NASA Multiangle Imaging SpectroRadiometer (MISR), 2000-2012	Rocio Duchesne	20
2:20 PM	Progress report on MISR-HR	Michel Verstraete	20
2:40 PM	Retrieving leaf properties and canopy structure from synergistic analyses of hyperspectral, multiangle, and polarimetric data	Yuri Knyazikhin	20
3:00 PM	Discussion	All	5

## Poster session II

3:05 PM	Poster viewing and break	All	90
---------	--------------------------	-----	----

## Snow/Ice-Covered Surfaces

4:35 PM	Seeing the forest (and snow) for the trees	Anne Nolin	20
4:55 PM	MISR - the only instrument capable of mapping sea-ice albedo in the polar regions: a demonstration	Jan-Peter Muller	20
5:15 PM	Discussion	All	5

## Wrap-up

5:20 PM	Closing comments	David Diner	10
5:30 PM	Adjourn		

## Posters

No.	Title	Lead author
1	Spectral invariance study with GroundMSPI	Christine Bradley
2	AirMSPI radiometric and spectral calibration	Carol Bruegge
3	Investigation of aerosol-cloud interactions in ship tracks using MISR	Jean Chen
4	Mapping shrub abundance in Arctic tundra with MISR	Mark Chopping
5	Improved validation database for Arctic tundra maps	Mark Chopping
6	Biomass changes in the Southwestern US	Mark Chopping
7	Irreducible 3D radiative transfer effects in multi-angle/multi-spectral radio-polarimetric signals (not noise!) from a mixture of clouds and aerosol in a large-footprint pixel	Anthony Davis
8	Particle property data quality flags for the MISR Aerosol Product	Barbara Gaitley
9	MISR characterization of dust sources in the Middle East and Africa from high-resolution cloud motion vectors	Olga Kalashnikova
10	ADAM - a global spectral BRDF database for simulating current and future sensors	Jan-Peter Muller
11	EU-FP7 QA4ECV - fusion of MISR, MODIS, VEGETATION, MERIS, AATSR, AVHRR, GEO for retrieving land surface ECVs from 1982-2015	Jan-Peter Muller
12	Evaluating climate-scale accuracy and linearity of reflected solar satellite cloud retrievals	Yolanda Roberts
13	AirMSPI polarimetric calibration	Felix Seidel
14	Observational evidence of fire-driven changes in cloud microphysics in convective regions	Michael Tosca
15	Satellite assessment of sea salt aerosol productivity: The Southern Ocean case study	Marcin Witek
16	Spectra of coniferous needle and shoot multi-angle reflectances and their polarized portions: Preliminary results from a field experiment	Bin Yang
17	A numerical package for polarized radiative transfer computation and aerosol/cloud/surface retrieval	Feng Xu